

At page 25, second paragraph, please delete and insert the following in lieu thereof:

When the output level of each sensor cell 11 is to be corrected, i.e., calibration is to be performed, a reference sample without any uneven pattern is detected as a measurement target by the sensor cell 11 or detection is performed without any object placed on the sensor cell, thereby making each sensor cell 11 detect the same measurement value. The signal output from the sensor cell 11 is input to an A/D conversion circuit 14 through a data line  $L_p$  and output as a digital output signal 4A.

At page 25, third paragraph, please delete and insert the following in lieu thereof:

The digital output signal 4A output from the A/D conversion circuit 14 is input to the signal processing circuit 110. The signal processing circuit 110 compares the digital output signal 4A output from the A/D conversion circuit 14 with the digital output signal which should be output (to be referred to as an expected value hereinafter) to calculate an adjustment parameter for adjusting the detection sensitivity of the sensor circuit 11b. The calibration circuit 105 is then controlled through the control line  $L_c$  on the basis of the calculated adjustment parameter.

At page 26, first paragraph, please delete and insert the following in lieu thereof:

The data line  $L_p$  and control line  $L_c$  are common to the respective sensor cells 11. The sensor cells 11 are sequentially selected, and output signals 2A from the sensor cells 11 are sequentially input to the A/D conversion circuit 14. As a

consequence, the signal processing circuit 110 controls the calibration circuit 105 in the sensor cell 11.

At page 26, third paragraph, please delete and insert the following in lieu thereof:

In this case, the signal processing circuit 110 includes the comparing circuit 104 and calibration reference signal generating circuit 103 described with reference to Fig. 10 as other signal processing circuits 110. In the case shown in Fig. 11, the input signal is a digital signal. When a digital signal is input to the comparing circuit 104 without any conversion, a known digital comparing circuit can be used as the comparing circuit 104. If the comparing circuit 104 is a general analog comparing circuit, an input signal is D/A-converted first and then supplied to the comparing circuit 104. The same applies to the calibration reference signal generating circuit 103.

At page 27, first paragraph, continuing to page 28, lines 1-10, please delete and insert the following in lieu thereof:

The sensor circuit 11b' with the voltage/time conversion function converts a signal having analog information as a voltage value into a signal having analog information in the time axis direction, and outputs the resultant signal as an output signal 2B like that shown in Fig. 14 (see Fig. 14:  $t_s$  is output time and changes). The output signal 2B is input to the A/D conversion circuit 14 through the data line  $L_D$  and output as a digital output signal. At the same time, the output signal 2B is supplied to the